

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): K. HILL ET AL.  
Serial No.: 09/342,707  
Filed: June 29, 1999  
For: METHOD OF FABRICATING BRAGG GRATING USING A  
SILICA PHASE GRATING MASK AND MASK USED BY  
SAME  
Group: 2874  
Examiner: B. Healy

#10

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U.S. PATENT & TRADEMARK OFFICE

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REQUEST FOR RECONSIDERATION

Assistant Commissioner for Patents  
Washington, D.C. 20231

June 2, 2000

Sir:

Reconsideration and allowance of this application is respectfully requested.

The present request is in response to the Office Action dated March 22, 2000. Appreciation is expressed to the Examiner for the allowance of claims 26, 28 and 29 and the indication of allowable subject matter in claims 2-7, 11-16, 18, 20-24 and 27. Appreciation is also expressed for granting the requested amendment to the specification to make reference that the present application is a CIP of copending U.S. Patent Application Serial No. 811,299 (now USP 5,216,739) and Serial No. 656,462 (now USP 5,104,209).

With regard to the statement made on page 2 that "there is no claim 42 in the case" and the 35 U.S.C. §112, second paragraph, rejection against claim 41, Applicants are enclosing herewith a copy of the Preliminary Amendment filed

November 12, 1999, and a return receipt postcard showing the receipt of this Preliminary Amendment on that date. As can be seen, this Preliminary Amendment canceled claim 41 and submitted new claim 42. As such, the 35 U.S.C. §112, second paragraph, rejection against claim 41 is obviated. With regard to claim 42, it is noted that this claim was canceled by the December 23, 1999 Amendment. Accordingly, neither claim 41 nor claim 42 are pending in the present application.

Reconsideration and removal of the 35 U.S.C. §102 rejection based on U.S. Patent 5,351,321 to Snitzer (hereinafter referred to as Snitzer '321) is respectfully requested.

In the Office Action, the Examiner has stated:

Snitzer et al. '321 teaches (Figs. 1-16) a method of making Bragg gratings in optical fibers and other waveguides comprising the steps of: placing an optical fiber medium 12, which can be made of silica (i.e., silicon dioxide), adjacent and parallel to a silica (silica dioxide) phase grating mask 24, 27, 28... and applying a collimating light beam 3V collimating lens 23 from the light source 25 in order to form a Bragg grating...on the photosensitive optical fiber medium 12. [emphasis added]

In fact, this not a correct characterization of the teachings of Snitzer '321. Specifically, Snitzer fails to disclose the use of silica, let alone silica glass, as recited in the claims, to form a phase grating mask. On the contrary, although Snitzer does disclose the use of silica for optical fibers, there is no disclosure in Snitzer '321 suggesting the use of silica or silica glass to form the mask, as called for the claims. Since a rejection under 35 USC §102 requires the

single reference to disclose every element of the claimed invention, the rejection necessarily falls. See Ex parte Levy 17 USPQ 2d 1461 (PTO Bd. of App. & Int., 1990).

What Snitzer does disclose is a method of making Bragg gratings and optical fibers and other waveguides comprising the steps of placing an optical fiber medium adjacent and parallel to a mask having a plurality of slits and applying a collimating light beam through the mask in order to form the Bragg gratings inside the fiber. Regarding this, Applicants are submitting herewith a Declaration under 37 C.F.R. §1.131 by Dr. Kenneth Hill, a co-inventor of the present reissue application, showing that this same subject matter disclosed by Snitzer is also disclosed in the earlier Hill et al., U.S. Patent 5,104,209 (hereinafter Hill '209). The Hill '209 patent was filed in the United States on February 19, 1991, well before the October 20, 1992 filing date of the Snitzer '321 patent. Therefore, under the provisions of 37 C.F.R. §1.131, and case law interpreting this rule, Snitzer '321 is unavailable as a reference under 35 U.S.C. §102(e) with regard to this subject matter.

Regarding this, the Examiner's attention is directed to the case of *In re Stempel*, 113 USPQ 77 (CCPA 1957), a copy of which is attached herewith. As stated in that case with regard to a Rule 131 affidavit:

We are convinced that under the law, all the Applicant can be required to show is priority with respect to so much of the claimed invention as the references happen to show. When he has done that, he has disposed of the reference. (113 USPQ at 81)

The case continues:

In the case of a reference, it is fundamental that it is valid only for what it discloses and if the Applicant establishes priority with respect to that disclosure, and there is no statutory bar, it has no effect at all. (113 USPQ at 81).

As noted in the Declaration and the above discussion, Snitzer '321 does not expressly disclose the claimed feature of a silica phase mask. Applicants have shown by Hill '209 reduction to practice of the subject matter disclosed in Snitzer '321 -- that is, a mask with multiple slits corresponding to the mask 28 shown in Figures 1 and 16 of Snitzer '321. As noted in the declaration and the above discussion, Hill '209 provides such a disclosure of a mask with multiple slits. Accordingly, it is respectfully submitted that the requirements of 37 C.F.R. §1.131 have been met by the submission of the attached declaration by Kenneth Hill, and removal of Snitzer '321 as a reference is respectfully requested. Correspondingly, removal of the 35 U.S.C. §102(e) rejection based on Snitzer '321 is also respectfully requested.

It is noted that the above discussion pertains to the fact that Snitzer '321 fails to expressly disclose the use of silica for a phase grating mask. Regarding this, it is noted that the Office Action in the present application states:

"Since the earlier patent cases do not have disclosure of the claimed silica glass phase grating mask, then Applicant is only entitled to the CIP filing date of 10/29/92."

As for the claim limitation of the "phase grating mask" per se, it is respectfully submitted that, again, Hill '209

provides the same disclosure as set forth in Snitzer '321 with respect to a phase grating mask. Specifically, both Hill '209 and Snitzer '321 disclose a slit mask with a plurality of slits which receive a collimating light beam to form a Bragg grating in the core of an optical fiber. As such, Hill '209 teaches a phase grating mask at least in the same manner as Snitzer '321 does.

Interestingly, the issue of whether the Snitzer disclosure found in the Snitzer '321 patent teaches a phase mask was discussed by the Board of Appeals in their May 28, 1998 decision in Serial No. 08/310,426, which application is a continuation application of the Snitzer '321 patent, and which application is also involved in interference no. 104,331 with the original Hill '588 patent (the original patent for the present reissue application). Referring to the statements from the May 28, 1998 Board of Appeals decision (copy attached) in the related Snitzer application, the Board members stated on page 5:

A "diffraction grating" is defined as: "an optical device consisting of an assembly of narrow slits or grooves, which by diffracting light produces a large number of beams which can interfere in such a way as to produce spectra."

Reference was made to the fifth volume of the McGraw-Hill Encyclopedia of Science and Technology for this definition. Under this definition, both Hill '209 and Snitzer '321 provide a diffraction grating since both teach a mask with an assembly of narrow slits which can diffract light to produce a large

number of beams which can interfere with one another to produce spectra. The Board goes on at page 7 to state:

"Most diffraction gratings cause a periodic modulation of phase across the wave front rather than a modulation of the amplitude. McGraw-Hill Encyclopedia, pg. 218 under 'diffraction'. Thus, a diffraction grating would be called a phase mask. As discussed previously, diffraction gratings have periodic variations in the amplitude transmission properties because of the alternating transparent and opaque slits." [underlining added for emphasis]

As such, Hill '209 clearly teaches a "phase mask" in the same manner as Snitzer '321 does, given the definition of such a phase mask by the Board of Appeals in the May 28, 1998 decision. Accordingly, it is respectfully submitted that Snitzer '321 is unavailable as a reference regarding the use of a phase mask since Hill '209, which has an earlier filing date, discloses the same type of phase mask as Snitzer '321.

It is noted that an Information Disclosure Statement is being filed herewith providing prior art cited in the Interference 104,331 for the Examiner's information and files.

Please charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 01-2135 (312.104331RO) and please credit any excess fees to such deposit account.

Respectfully submitted,

ANTONELLI, TERRY, STOUT & KRAUS, LLP



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312.104331R00

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RESPONSE TO NOTICE UNDER 37 CFR 1.251

Assistant Commissioner  
for Patents  
Washington, D.C. 20231

November 9, 2001

Sir:

Receipt is hereby acknowledged of a Notice Under 37 CFR 1.251 - pending application, mailed August 14, 2001. This Notice indicates that the above-identified application cannot be located in the USPTO and that the USPTO is, therefore, initiating a reconstruction of the file pursuant to 37 CFR 1.251. Accordingly, applicants are providing herewith a list of all correspondence between the Office and the applicant for the above-identified application, except for U.S. Patent documents. Applicants are also providing herewith copies of all such correspondence. The undersigned attorney hereby states that the copies provided herewith are complete and accurate copies of applicants' record of all correspondence

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between the Office and the applicant for above-identified application, except for U.S. Patent documents. The undersigned attorney is not aware of any correspondence between the Office and the applicant for the above-identified application that is not among the applicants' records.

In light of the providing of the attached list of correspondence and copies, reconstruction of the file for the above-identified application is respectfully requested.

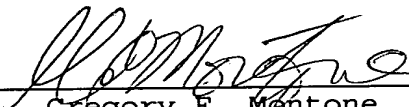
If the Examiner believes that there are any other points which may be clarified or otherwise disposed of, either by telephone discussion or by personal interview, the Examiner is invited to contact applicants' undersigned attorney at the number indicated below.

To the extent necessary, the applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees, to the deposit account of Antonelli, Terry, Stout & Kraus, Deposit Account No. 01-2135 (312.104331R00).

Respectfully submitted,

ANTONELLI, TERRY, STOUT & KRAUS, LLP

By

  
Gregory E. Mentone  
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Attachment





LIST OF CORRESPONDENCE BETWEEN OFFICE AND APPLICANTS

1. Correspondence to Assistant Commissioner for Patents regarding filing of Reissue application papers of Kenneth O. Hill (June 29, 1999):

Preliminary Amendment;  
Utility Patent Application Transmittal;  
Specification, Claims and Abstract (14 pages) ;  
Reissue Declaration (3 pages)  
Sheets of Drawings (4 pages);  
Reissue Application by the Assignee, Offer to  
Surrender Patent (1 page); and  
Statement Under 37 CFR 1.37(b) (1 page)

2. Preliminary Amendment  
(November 12, 1999)
3. Office Action Summary  
(December 17, 1999)
4. Amendment  
(December 23, 1999)
5. Response  
(February 25, 2000)
6. Office Action Summary  
(March 22, 2000)
7. Information Disclosure Statement, including PTO 1449  
and Exhibit List  
(June 2, 2000)
8. Declaration of Prior Invention in the United States  
Under 37 CFR 1.131 to Overcome Cited Patent  
(May 30, 2000)
9. Request for Reconsideration including case cite  
(June 2, 2000)

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